

DOCUMENT RESUME

ED 225 906

SO 014 482

AUTHOR Cwi, David
TITLE The Economic Impact of Ten Cultural Institutions on the Economy of the Minneapolis-St. Paul SMSA.
INSTITUTION Johns Hopkins Univ., Baltimore, Md. Center for Metropolitan Planning and Research.
SPONS AGENCY National Endowment for the Arts, Washington, D.C.
PUB DATE 80
GRANT R80-22-1N
NOTE 52p.; For related documents, see SO 014 480-491.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Arts Centers; Audiences; Community Characteristics; *Cultural Centers; Dance; *Economic Factors; Economic Research; *Expenditures; *Fine Arts; Income; Local Government; Music; Opera; *Resource Allocation; Salaries; Theaters; *Urban Areas
IDENTIFIERS Econometrics; *Minnesota (Twin Cities)

ABSTRACT

The impact on the economy of 10 cultural institutions in the Minneapolis-St. Paul area was determined by measuring their 1978 direct and indirect financial effects. The institutions are the Children's Theatre Company, Chimera Theatre, Cricket Theatre, Guthrie Theatre, Minneapolis Institute of Arts, Minnesota Dance Theatre, Minnesota Orchestra, St. Paul Chamber Orchestra, Walker Art Center, and Science Museum of Minnesota. Data gathered from the 10 institutions include operating and financial characteristics and total expenditures with local firms. Staff and audience surveys, tax rates and bases for all local jurisdictions, local government expenditures, and the number of local housing units were also obtained. Direct expenditures amounted to \$28,600,000. Twenty-six percent of the total went toward local expenditures for goods and services, 38 percent for salaries and wages, 26 percent filtered into the community through local audience spending, and 10 percent through non-local audience spending. Guest artists spent \$104,223 locally. Secondary business volume generated by institution-related effects totaled \$57 million. Revenues to local government from the 10 institutions came to \$2,135,000 while costs to local government amounted \$1,146,000. (KC) X

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

This document has been reproduced as

received from the person or organization

originating it

X Minor changes have been made to improve

reproduction quality

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Tom Bradshaw

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

THE ECONOMIC IMPACT
OF TEN CULTURAL INSTITUTIONS ON THE
ECONOMY OF THE MINNEAPOLIS-ST. PAUL SMSA

1980

The Johns Hopkins University
Center for Metropolitan Planning and Research

Principal Investigator/
Report Written By:

David Cwi

Project Manager:

D. Alden Smith

Computer Programming/
Data Base Management:

Mark Keintz
Brian Peters

Audience Study Sampling Design/
Selected Analysis:

Ralph Taylor

Technical Assistance in
Design and Analysis:

Allen Goodman
Henry Henderson

Project Secretary:

Patty Strott

Student Assistants:

Gayle Cohen
Scott Holupka
Elizabeth Platt
Ariel Vannier

506014482
This report was prepared under grant number R80-2241N from the Research Division of the National Endowment for the Arts. Points of view or opinions stated in this document are those of the author and do not necessarily represent the official position or policies of the National Endowment for the Arts, The Johns Hopkins University, or the Center for Metropolitan Planning and Research.

TABLE OF CONTENTS

	Page
LIST OF EXHIBITS	i
ACKNOWLEDGEMENTS	ii
PREFACE: ORGANIZATION OF THE REPORT	vi
SECTION I: INTRODUCTION	1
A. The History of the Project	1
B. Project Objectives	2
C. The Institutions Examined in Minneapolis/St. Paul	4
SECTION II: THE MINNEAPOLIS/ST. PAUL ECONOMY AND ITS ARTS COMMUNITY: AN OVERVIEW	8
SECTION III: THE ECONOMIC EFFECTS OF TEN CULTURAL INSTITUTIONS ON THE MINNEAPOLIS/ST. PAUL METROPOLITAN AREA	18
A. Study Procedures	18
-- Scope of Study	18
-- Study Methods, and Limitations	18
-- Data Requirements	20
B. Direct Effects	21
-- Local Institutional Expenditures for Goods, Services and Salaries	23
-- Guest Artist Spending	23
-- Audience Spending	23
C. Secondary Effects	27
-- Secondary Business Volume, Personal Incomes and Jobs	28
-- Additional Investment and Expansion of the Local Credit Base	29
D. Government Expenditures and Revenues	30
SECTION IV: CONCLUDING CAVEATS REGARDING STUDY FINDINGS	36

LIST OF EXHIBITS

	Page
Exhibit 1	Acknowledgements iii
Exhibit 2	List of Participating Institutions 3
Exhibit 3	Demographic Data on Households in the Minneapolis/St. Paul SMSA..... 9
Exhibit 4	Number of Various Arts and Cultural Establishments in the Twin Cities Metropolitan Area Yellow Pages..... 16
Exhibit 5	Summary of Direct Effects for Ten Arts Institutions in the Minneapolis/St. Paul SMSA, FY 1978 22
Exhibit 6	Audience Summary Data for Ten Arts Institutions in the Minneapolis/St. Paul SMSA..... 25
Exhibit 7	Ten Minneapolis/St. Paul Arts Institutions: Percentage of Audience from Out-of-Region..... 26
Exhibit 8	Summary of Secondary Economic Effects for Ten Arts Institutions in the Minneapolis/St. Paul SMSA, FY 1978 31
Exhibit 9	Government Revenues of Ten Arts Institutions, Minneapolis/St. Paul SMSA, 1977-1978 33
Exhibit 10	Selected Revenues and Costs to Local Government Attributable to Ten Minneapolis/St. Paul Arts Institutions..... 34

ACKNOWLEDGEMENTS

In recent years there has been a growing interest in understanding better the status and community impact of artistic and cultural institutions. This case study is one of six conducted as a continuation of a research effort begun in 1976. These efforts have been supported by the National Endowment for the Arts through its Research Division. (The history of the entire project is described in the "Introduction" section to this report.) We thank the Endowment for its support and acknowledge also cost sharing provided by the Johns Hopkins University and participating agencies.

The successful completion of this six city project was due to the efforts of a number of persons in the participating cities and institutions. We are most pleased to acknowledge the principal project staff at the Twin Cities Metropolitan Arts Alliance. William Driver, Managing Director of the Alliance, served as Study Director. His responsibilities included the coordination of the wide array of day-to-day tasks and responsibilities described in the technical supplement to this report. Dr. Julian L. Phillips assisted in coordinating requisite audience studies.

Exhibit 1 lists the staff persons and volunteers identified by the Twin Cities Metropolitan Arts Alliance as individuals who actively participated in the study. We want to express our thanks not only to them but to the institutional officers and staff who cooperated so magnificently in all phases of the study effort. We also acknowledge and appreciate the efforts of the Metropolitan Council of the Twin Cities Area in gathering community data, as well as the assistance of the Greater Minneapolis Chamber of Commerce and the Minnesota Department of Taxation and Revenues in reviewing data and providing supplemental material.

Exhibit 1

Acknowledgements

CHILDREN'S THEATRE COMPANY

Richard H. Jackson, President
John Clark Donahue, Artistic Director
Jay Bush, Administrative Director

CHIMERA THEATRE

Gloria Segal, President
James Borland, Executive Producer

CRICKET THEATRE.

Preston Townley, President
Bill Semans, Producing Director
Marcy Dowse, Business Manager

GUTHRIE THEATER

Donald Dwight, Chairman
William George, President
Donald Schoenbaum, Managing Director
Donald Michaelis, Administrative Director

MINNEAPOLIS INSTITUTE OF ARTS*

Samuel Sachs II, Director
Ruth Humleker, Associate Director (Past)
Timothy Fiske, Associate Director (Current)

MINNESOTA DANCE THEATRE

Philip Getts, President
Loyce Houlton, Artistic Director
Beverly Chare Semon, General Manager

MINNESOTA ORCHESTRAL ASSOCIATION

Stephen R. Pflaum, Chairman
Richard M. Cisek, President
Richard Bass, Managing Director
John G. Fischer, Development Director
Anne Cheney, Finance Director

SAINT PAUL CHAMBER ORCHESTRA

Eugene M. Warlich, President
Thomas Gerdom, Managing Director

Exhibit 1 (cont'd)

SCIENCE MUSEUM OF MINNESOTA

John Roe, Chairman
Dr. Wendell A. Mordy, President

WALKER ART CENTER

Alice E. Wittenberg, President
Martin Friedman, Director
Donald Borrmann, Administrative Director
Robert Sain, Development Director

MINNEAPOLIS SOCIETY OF FINE ARTS*

David McGlaughlin, Chairman
John M. Dozier, President
James V. Toscano, Vice-President for Resource Development (Past)
DeCourcy McIntosh, Vice-President for Resource Development (Current)

METROPOLITAN COUNCIL

Rey Boezi, (Past) Director of Human Resources
Roger Israel, Director of Human Resources Planning
Sara Burstein, Program Planner, Regional Arts Council
Victor Ward, Research Planner, Comprehensive Planning

TWIN CITIES METROPOLITAN ARTS ALLIANCE

William G. Driver, Managing Director
Dr. Julien L. Phillips, Audience Survey Coordinator

Board of Directors

Donald Michaelis, Past President
Marcy Dowse, President
Doug Eichten, Vice-President
Thomas Kigin, Secretary-Treasurer
Dixon Bond
Ted Crawford
Leigh Kamman
Karla Williams
Ronald Olson
Libby Larsen
Elizabeth Hinz
M.E.G. Roy

* The Minneapolis Society of Fine Arts is the governing and supporting organization of the Minneapolis Institute of Arts.

At the Center for Metropolitan Planning and Research a number of persons assisted in the design and implementation of the research program and in the evaluation and analysis of data and methods. D. Alden Smith served as project manager and participated in the design of data management and documentation procedures. He was also principally responsible for the computations required to apply our economic impact model, including the development of techniques to appropriately weight as required various audience and other data. Ralph Taylor participated in the design of questionnaires and audience survey sampling frames. He was also responsible for the design and analysis of surveys to assess the local impact of study findings. Henry Henderson assisted in the design of the community data inventory, including the identification of local data sources. Mark Keintz was responsible for project related computer data processing. We acknowledge also the assistance of David Greytak of Syracuse University in developing model coefficients appropriate for each examined city.

Stephen Gottfredson and Allen Goodman gave willingly of their time, advising on numerous technical matters and commenting on drafts of this report. Student assistants involved in various data handling chores included Elizabeth Platt, Gayle Cohen, Ariel Vannier, Scott Holupka, and especially Brian Peters who assisted Mark Keintz and later took on his responsibilities.

This report provides further evidence of the variety of skills required in the conduct and reporting of research. We are all especially grateful to Patty Strott for undertaking the role of project secretary. She was responsible for various facets of project organization and communication including the painstaking task of typing successive drafts and final reports.

David Cwi

PREFACE: ORGANIZATION OF THIS REPORT

This report presents a case study of the economic impact of ten institutions on the economy of the Twin Cities metropolitan area. The "Introduction" briefly presents the history and purpose of the project, and indicates the process by which cities and institutions were selected.

The report continues with a section briefly describing the Twin Cities area economy and the broader arts community, while the third section of the report presents our findings concerning the economic effects of the examined institutions. This section begins with an outline of the study approach, data requirements, and methods. Included is a review of the limited nature of our analysis. Findings are presented in terms of direct and secondary effects on local business volume, personal incomes and jobs, business investment and expansion of the local credit base together with effects on government revenues and expenditures.

A variety of technical matters concerning data quality and analytical methods are addressed in this section, especially matters involving local and visitor audience spending. The reader is referred to a detailed technical supplement for a more complete discussion of data handling and methodological issues.

The final section of the report is devoted to a further review of the limited nature of our analysis, including a discussion of the less tangible economic effects that have not been identified. Caveats are reviewed regarding the use of the data for the development of arts and economic development policies.

SECTION I: INTRODUCTION.

A. The History of the Project

This report is one of a set of six case studies of the economic impact of arts activities conducted during fiscal 1978 by staff of the Johns Hopkins University Center for Metropolitan Planning and Research in partnership with arts agencies in: Columbus, Minneapolis-St. Paul, Springfield, Illinois, Salt Lake City, St. Louis and San Antonio.* The studies are a continuation of a pilot effort conducted in Baltimore in fiscal 1976.** Research has been supported by the National Endowment for the Arts with significant cost sharing and donated services by the Johns Hopkins University and local sponsoring agencies. An overview and analysis of the six city Partnership Cities Project is currently in progress and will result in a separate report. A technical supplement for each case study is also being prepared. It will include a review of study procedures in each city and the data used in estimating various effects.

The six participating cities were selected from an initial group of approximately 70 cities and institutions that had responded to either letters sent to local and state arts agencies or announcements in arts-related publications. Approximately 20 agencies continued to express

*Study sponsors include The Greater Columbus Arts Council, Twin Cities Metropolitan Arts Alliance, Springboard, The Utah Arts Council, The Arts and Education Council of Greater St. Louis, and the Arts Council of San Antonio.

**David Gwi and Katharine Lyall, Economic Impacts of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore, Research Division Report #6. New York: Publishing Center for Cultural Resources, 1977.

interest after evaluating the level of effort required for participation.

A national advisory committee helped in the selection of the final six cities.

Exhibit 2 presents the partnership cities and examined institutions. They are scattered throughout the United States and include a variety of different types of museums and performing arts organizations. It is important to note that they are not a scientific sample but rather an illustrative cross section of some of the more well-known local resources in each city. A variety of arts agencies are represented as study sponsors, each of whom utilized somewhat different management plans and local resources. Our overview and analysis of the entire six city project will include an assessment of the impact of these different arrangements on study conduct.

B. Project Objectives

The Arts Endowment's original decision to support the development of a model to assess the economic impact of the arts was made in response to intense interest by arts agencies and institutions in methodologies for the conduct of economic impact studies. Our approach was intended to enable local agencies and institutions to conduct useful and credible studies given limited resources for research purposes.

The approach developed and piloted in Baltimore utilized a 30 equation model to identify a variety of effects involving not only businesses but government and individuals as well.* The model utilizes data from the

*This model was adapted from J. Caftrey and H. Isaacs, Estimating the Impact of a College or University on the Local Economy (Washington, D.C.: American Council on Education, 1971).

Exhibit 2

List of Participating Institutions

Minneapolis/St. Paul

The Children's Theatre
Chimera Theatre
The Cricket Theatre
The Guthrie Theater
Minneapolis Institute of Arts
Minnesota Dance Theatre
Minnesota Orchestra
St. Paul Chamber Orchestra
Walker Art Center
The Science Museum of Minnesota

Salt Lake City

Ballet West
Pioneer Memorial Theatre
Repertory Dance Theatre
Salt Lake Art Center
Theatre 138
Tiffany's Attic
Utah Museum of Fine Arts
Utah Symphony
Utah Opera Company
Ririe-Woodbury Dance Co.

Springfield

Springfield Symphony Orchestra
Springfield Theatre Guild
Springfield Art Association
Springfield Ballet
Art Collection in Illinois
State Museum
Old State Capitol
Community Concert Series
Springfield Municipal Opera
Old State Capitol Art Fair
Great American People Show

St. Louis

St. Louis Art Museum
St. Louis Conservatory & School
for the Arts (CASA)
St. Louis Symphony
Missouri Botanical Garden
McDonnell Planetarium
Loretto-Hilton Repertory Theatre
Museum of Science and Natural
History
Dance Concert Society

Columbus

Ballet Metropolitan
Columbus Museum of Art
Columbus Symphony Orchestra
Center of Science & Industry
Players Theatre of Columbus
Columbus Association for the
Performing Arts (Ohio
Theatre)

San Antonio

San Antonio Symphony
San Antonio Opera
The Witte Museum
Museum of Transportation
The Carver Cultural Center

internal records of examined arts institutions as well as from local, state, and federal sources. Audience research is also required as well as a survey of the staff of examined institutions. Consequently, the study process can provide sponsors with an opportunity to develop a data base on audiences, staff, and institutional operating characteristics that can be updated over time and may be useful in its own right. In the context of the work conducted up to that time, the Baltimore Case Study made several advances, which are described in that report.

Following the dissemination of the study, questions were raised regarding the impact of arts organizations in other communities. It was hoped that additional case studies focusing on a wide array of institutions would lead to a better understanding of the economic effects of various types of arts activities in alternative community settings.

The six individual case studies deal with a limited set of local cultural attractions. The necessity to conduct simultaneous audience studies over several weeks as well as other demands imposed by study methods sharply limit the number of institutions that can be included. The case studies report on the impact of illustrative institutions selected by the local sponsoring agencies. They are not studies of the impact of all local artistic and cultural activities.

C. The Institutions Examined in Minneapolis/St. Paul

This report is the result of research on the audiences, staff, and financial and operating characteristics of the following ten cultural institutions in the Minneapolis/St. Paul SMSA:

The Children's Theatre	Minnesota Dance Theatre
Chimera Theatre	Minnesota Orchestra
The Cricket Theatre	St. Paul Chamber Orchestra
The Guthrie Theater	Walker Art Center
Minneapolis Institute of Arts	The Science Museum of Minnesota

These institutions represent a wide range of institutional types and include some of the more well-known local organizations. The institutions were selected for study by the Twin Cities Metropolitan Arts Alliance as a result of a process initiated locally to identify interested organizations. Principal project staff at the Twin Cities Metropolitan Arts Alliance together with active local participants are cited in the acknowledgements at the outset of this report.

The examined activities are examples of the importance of committed individuals and groups to the development of local cultural institutions. Chimera Theatre came into existence in June of 1969 through the purchase of the remaining assets of the defunct Eastside Theatre (the fourth to fail at the same location). This community theatre held 290 performances in 1978-1979 as well as over 50 educational classes.

The Minnesota Dance Theatre and School was founded in 1961 as "The Contemporary Dance Playhouse" by choreographer and Artistic Director Loyce Houlton. It is now the largest dance organization in the midwest with 20 professional dancers, 3,600 students, and 30 dance works in repertoire.

The Guthrie Theater opened in 1963, largely due to the efforts of Oliver Rea, Peter Zeisler, and Sir Tyrone Guthrie, marking the start of the regional professional theatre movement. In 1979 the Guthrie presented a total of 21 productions in 744 performances/presentations and an additional 473 workshops/classes.

The Minneapolis Society of Fine Arts was established in 1883, and created the Minneapolis Institute of Arts (MIA) in 1915. The original museum building was completed in 1915, a new wing added in 1927, and again expanded in 1974. Its current collection numbers over 60,000 works of art. The MIA also presents a broad range of community education programs.

In 1961 the Moppet Players launched the first full-time theatre for children in Minnesota. In 1965 they became the Children's Theatre company of The Minneapolis Institute of Arts, and in 1973 became a full-fledged member of the Minneapolis Society of Fine Arts (along with MIA and the Minneapolis College of Art and Design). In 1975 they became fully independent.

The St. Paul Chamber Orchestra was founded in 1967. Currently, the Orchestra consists of 26 full-time professional musicians and two conductors.

The Cricket Theatre was founded by Bill Semons in 1971. At the time of the study, the Cricket Theatre was operating out of a converted movie theatre in Northeast Minneapolis. Since then, it has moved into new quarters at the Hennepin Center for the Arts. The Cricket Theatre is dedicated to bringing new plays to the Minneapolis-St. Paul area:

The Science Museum of Minnesota traces its beginnings to a luncheon in 1907 when a small group of St. Paul businessmen, headed by Charles W. Ames, met to discuss the "intellectual and scientific growth of St. Paul." Ames proposed a series of free lectures and Thomas Irvine pledged financial support. Thus was born the St. Paul Institute of Arts and Letters -- destined to become The Science Museum of Minnesota. In 1927 the Museum moved to the Merriam Mansion on Capitol Hill. However, it was in almost constant need of new space and, in 1965, moved into a new building at 30 East Tenth Street. In 1978 the Science Museum opened its own new building across the street on Wabasha. The Science Museum also maintains

7

a planetarium and exhibit hall in the Minneapolis Public Library, the Lee and Rose Warner Nature Center near Marine-on-the-St. Croix and the Metcalf Natural History Study Center at Afton.

Walker Art Center began as a gallery that exhibited the extensive collection of one man -- Thomas Barlow Walker -- who in 1874 began collecting paintings and prints for his Minneapolis home. In 1879, Walker built the first public art gallery in the Midwest. By the 1920's the T.B. Walker Art Galleries had expanded to cover nearly a city block. From the turn of the century until 1976, the Art Center was supported by an annual operating grant from the T.B. Walker Family Foundation. Since many of Walker's descendants had left Minnesota for California, it made sense to transfer control of the Art Center to a board of directors whose members would be drawn from the Minneapolis-St. Paul community the Art Center serves. In 1974, the foundation agreed to transfer the bulk of the assets of the Art Center to the Art Center's board of directors and the board agreed to launch a major endowment fund drive. On July 30, 1976, this transfer was completed.

The Minnesota Orchestra was founded in 1903 as the Minneapolis Symphony Orchestra. The 95 member orchestra is world renowned and currently presents a 52 week season with performances in Minneapolis, St. Paul, St. Joseph, and Rochester, Minnesota.

In the following section we place the examined institutions within the broader context of the Minneapolis-St. Paul economy and arts community.

SECTION II: THE MINNEAPOLIS/ST. PAUL ECONOMY

AND ITS ARTS COMMUNITY: AN OVERVIEW

The next section of this report discusses study findings and reviews the strengths and limitations of our approach to examining economic effects. To appreciate this discussion as well as the effects attributed to the ten examined institutions, it is useful to examine the economy and arts community of the Minneapolis/St. Paul Metropolitan Area briefly. Exhibit 3 presents selected data of interest on the Minneapolis/St. Paul area market.

The Minneapolis/St. Paul Standard Metropolitan Statistical Area (SMSA) consists of Hennepin, Ramsey, Anoka, Dakota, Washington, Wright, Scott, Carver, and Chisago counties in Minnesota and St. Croix county in Wisconsin. The 1978 population and business volume of the SMSA was estimated to be 2,063,770¹ and \$22,015,371,080 respectively. In 1977, the Twin Cities SMSA ranked 15th in the nation in population (2,042,900), up from 17th in 1970 (1,965,391).²

The history of the area dates back to the late 17th century. Explorers passed through the site of St. Paul as early as 1680, and by 1805 an unofficial treaty with the Sioux had been made. St. Paul was incorporated in 1854, and Minneapolis was chartered as a city in 1867.

Minneapolis' first major industries were based on water power -- saw-mills and flour mills. St. Paul developed as a commercial center, particularly for the fur trade. Banking and railroading developed quickly in

¹Metropolitan Council estimates for nine Minnesota counties, not entire SMSA.

²Sales and Marketing Management, Vol. 121; No. 2, July 24, 1978, pp. 6-115.

Exhibit 3

Demographic Data on Households in the
Minneapolis/St. Paul SMSA

SMSA

INCOME					
1977 Median Household Effective Buying Income (1)	% of Households by EBI Group (1)*			Average Annual Change in per Capita Income, 1969 to 1974 (2)	1969 Median Family Income (3)
	(A)	(B)	(C)	(D)	
\$16,915	5.5	17.1	37.3	20.9	7.7% \$11,682

CITY

INCOME						
	1977 Median Household Effective Buying Income (1)	% of Households by EBI Group (1)*			Average Annual Change in per Capita Income, 1969 to 1974 (2)	1969 Median Family Income (2)
		(A)	(B)	(C)	(D)	
Minn.	\$13,059	8.0	19.4	28.7	13.8 7.9%	\$9,958
St. Paul	\$15,346	6.4	17.3	33.1	18.1 7.5%	\$10,536

* Effective Buying Income refers to personal income less personal tax and nontax payments. Nontax payments include fines, fees, penalties, and personal contributions for social insurance.

- SOURCES: (1) Sales and Marketing Management, Vol. 121, No. 2, July 24, 1978, P. C. - 116.
 (2) County and City Data Book 1977, U.S. Dept. of Commerce, Census Bureau, p. 570-571, p. 698-699.
 (3) 1970 Census of Population, U.S. Dept. of Commerce, Census Bureau, Table 89.

Exhibit 3 (cont'd)

SMSA

Age (As of 12/31/77)					EDUCATION, 1970 Persons 25 Years Old and Over School Years Completed (2)			
Median Age of Pop. (1)	% of Pop. by Age Group (1)				Median	Less than 5 Yrs.	4 Yrs. of High School Or More	4 Yrs. of College Or More
	18-24 Yrs.	25-34 Yrs.	35-49 Yrs.	50 and Over				
27.9	14.6	18.2	15.7	21.3	12.4 Yrs.	1.7%	66.1%	14.8%

CITY

Age (As of 12/31/77)					EDUCATION, 1970 Persons 25 Years Old and Over School Years Completed (2)				
	Median Age of Pop. (1)	% of Pop. by Age Group (1)				Median	Less than 5 Yrs.	4 Yrs. of High School Or More	4 Yrs. of College Or More
		18-24 Yrs.	25-34 Yrs.	35-49 Yrs.	50 and Over				
Minn.	30.7	20.0	15.6	12.4	30.9	12.2 Yrs.	2.3%	58.0%	12.4%
St. Paul	30.2	17.0	14.8	13.3	29.6	12.2 Yrs.	2.8%	57.2%	11.6%

SOURCES: (1) Sales and Marketing Management, Vol. 121, No. 2,
July 24, 1978, P. C. - 115.
(2) County and City Data Book 1972, U.S. Dept. of Commerce,
Census Bureau, p. 559, 715.

Exhibit 3 (cont'd)

MINNEAPOLIS/ST. PAUL, MINNESOTA

SMSA *

	POPULATION				POPULATION CHANGE IN %	
	1977 (1)	1975 (2)	1970 (2)	1960 (3)	1970-1975 (2)	1960-1970 (2)
	2,042,900	2,010,841	1,965,391	1,482,030	3.2	23.0

CITY

	POPULATION				POPULATION CHANGE IN %	
	1977 (1)	1975 (2)	1970 (2)	1960 (3)	1970-1975 (2)	1960-1970 (2)
Minn.	353,400	378,112	434,400	482,872	-13.0	-10.0
St. Paul	267,600	279,535	309,866	313,411	-9.8	-1.1

* Figure does not include data for St. Croix County, Wisconsin.

- SOURCES: (1) Sales and Marketing Management, Vol. 121, No. 2, July 24, 1978,
P. C. - 115.
- (2) County and City Data Book 1977, U.S. Dept. of Commerce,
Census Bureau, P. 568, 696.
- (3) County and City Data Book 1962, U.S. Dept. of Commerce,
Census Bureau, P. 440, 528.

St. Paul, as did the manufacture of boots and shoes. Minneapolis advanced from a flour milling center to become the country's primary wheat market.

Unless otherwise noted, the following information is largely taken from the Greater Minneapolis Chamber of Commerce's publication "Profile -- Economic and Demographic Information on the Minneapolis/St. Paul Metropolitan Area" (Fall, 1978).

In 1976 there were 38,457 firms in the SMSA of which 3,375 were in manufacturing, 4,114 in wholesale trade, 9,769 in retail trade and 11,046 in services. Twenty-eight of the manufacturing firms, four of the retail firms, and fourteen of the services firms employ more than 1,000 people.

In 1976 manufacturing accounted for 30% of the employed work force with services accounting for 31.5%, retail trade 25.3% and wholesale trade 10%.

Fortune listed thirteen Twin Cities companies among its top 500 and included eleven others in its second 500 list of industrial companies ranked by sales.³ Thirteen Twin Cities companies are listed by Fortune among the largest non-industrial corporations in the nation.⁴ Well known firms such as Control Data, Honeywell, Univac (Division of Sperry Rand), 3M, General Mills and Pillsbury started here and continue to grow. In the past 25 years Control Data has grown from infancy to a corporation employing over 10,000 people locally.

The growth of the electronics and related science industries in Minnesota has been spectacular. Early in 1955, there were 89 such firms employing slightly over 26,000 people. By the end of 1967, there were 159

³"500 Largest Industrial Companies," Fortune, May 1978.
"Second 500 Largest Industrial Corporations," Fortune, June 19, 1978.

⁴"The Largest Non-Industrial Corporations," Fortune, July 17, 1978.

companies employing over 87,000 people (an employment growth of 237 percent).

A recent study by the Minnesota Department of Economic Development showed 93,600 persons employed in the electronic related industries.

These firms and others have helped make the Twin Cities one of the largest business centers between Chicago and the West Coast. The area is the distribution center for the Upper Midwest. Minneapolis is also the headquarters for the Ninth Federal Reserve District Bank.

Business is attracted to Minneapolis-St. Paul for several reasons, including its geographic location and transportation services. The Twin Cities area is the hub of the Upper Midwest's transportation network and is served by ten passenger airlines, six barge lines, three inter-state bus line, six railroads (freight) and AMTRAK, and over 100 truck lines.

Minneapolis-St. Paul also has a strategic location at the head of navigation on the Mississippi River and the Port now handles in excess of three million tons annually. The Twin Cities comprise the nation's 7th largest distribution center and the 3rd largest trucking distribution center, while the Minneapolis/St. Paul Airport is ranked second nationally for remaining open year 'round. Over 7 million travelers pass through each year.

Industrial development in the Minneapolis metropolitan area continues at a rapid pace. Urban renewal projects, new office buildings, retail facilities and shopping centers have totaled over \$500 million in the last ten years. In 1971 four of the largest office buildings were under construction: the 57 story IDS Center, the tallest building between Chicago and San Francisco; the Federal Reserve Bank Building; the Midwest Plaza and the Peavey Building. The twin towered Hennepin County Government Center was completed in 1974. Currently under construction are the First Minneapolis-Hines Pillsbury Center, a two towered complex housing

the new Pillsbury world headquarters and the First National Bank of Minneapolis; Northwestern National Bank's \$20 million computer center in the Gateway area; and Northwestern National Life Insurance Company's 20-story companion tower to the company's home office building. Other companies expanding in the city include Honeywell, Lutheran Brotherhood, and Sears Roebuck. In the spring of 1979, construction is expected to begin on the City Center project, a \$120 million complex which will feature a new Donaldson's department store, shopping complex, hotel and the Northwestern Bank Tower.

The Twin Cities has also become a popular convention and tourism area. The 100,000 square foot Minneapolis Exhibit Hall seats 14,000 people and there are 9,500 seats in the adjoining main auditorium. In 1977 Minneapolis was the site for 356 conventions bringing \$54 million into the area.

The arts community includes 37 art galleries, 13 fine arts museums and institutes as well as 39 playhouses and 85 movie theatres. There is a museum of Natural History, many community and children's theatres, and fine libraries. The Twin Cities are one of the six cities in the United States to host the Metropolitan Opera annually.

The examined institutions are only ten of the many non-profit arts and cultural organizations in the Twin Cities area. These institutions represent a rich array of artistic and cultural activity. While the examined institutions may typify the impact of various types of institutions, they are not intended to represent the full range of locally available commercial and non-profit activities. Consequently, various assumptions will need to be made by individuals seeking to generalize concerning the status and impact of the entire local "cultural industry". It is clear,

however, that the examined institutions do not exhaust the impact of this industry, however it is defined. For example, census data for 1970 (which remains the best available until next year) show a total of 7,048 employed Writers, Artists and Entertainers in the Twin Cities SMSA.* Total full-time employment at the examined institutions was 777.

Even a casual inspection of the area yellow pages telephone directory reveals a variety of enterprises, some portion of which may be deemed cultural if not the arts. Exhibit 4 cites selected categories within the directory and the number of establishments listed.

Data on the impact of some elements of these additional business sectors is available from the County Business Patterns series (1977). Below are listed, for example, data on various retail establishments used by the general public together with their Standard Industrial Classification code.**

		<u>Number</u>	<u>Employees</u>	<u>Payroll (\$000)</u>
SIC 5732	TV-Radio Stores	155	881	8,479
SIC 5733	Music and Record Stores	81	711	5,651
SIC 5942	Bookstores	59	279	1,575
SIC 5946	Photography Stores	30	221	1,368
SIC 7832	Movie Theatres (except drive-in)	50	1,245+	2,923+
	TOTAL	375	3,337+	19,996+

* This represents actors, architects, authors, dancers, designers, musicians and composers, painters and sculptors, photographers, radio and TV announcers, and a 'miscellaneous' category. Excluded are individuals employed in art galleries and other arts-related positions. Source: *Where Artists Live: 1970*, Research Division Report #5, A Study by Data Use and Access Laboratories, New York: Publishing Center for Cultural Resources, July 1977.

** This approach to describing the culture industry was suggested by Louise Wiener's analysis of the national culture industry, c.f. Louise Wiener, "The Cultural Industry Profile," unpublished memo, January 1979; developed for submission to the Federal Council on the Arts and Humanities as part of a broader issues identification memorandum. The data cited above are conservative if only because census confidentiality requirements limit the availability of data when the number of firms is small. SIC classifications with suppressed data are indicated above by "+" intended to signify that the actual number is greater than that shown. Employee data indicates total number of persons employed whether full or part-time.

BEST COPY AVAILABLE

Exhibit 4

Number of Various Arts and Cultural Establishments

Listed in the Twin Cities Metropolitan Area Yellow Pages

Art:		Music:	
Galleries and Dealers (1)	89	Arrangers and Composers	7
Metalwork	2	Background	13
Needlework and Materials	34	Dealers	-
Restoration	5	Instruction:	-
Schools	8	Instrumental	59
		Vocal	7
Artists:		Musical Instruments:	
Commercial (2)	219	Dealers	89
Fine Arts (2)	15	Repair	31
Materials and Supplies	76	Wholesale and Manufacturers	12
Book Dealers:		Musicians (3)	41
Retail (3)	130	Orchestras and Bands	8
Used and Rare	25	Organs	92
Wholesale	14	Repair and Tuning	19
Costumes:		Photo Engravers	12
Masquerade and Theatre	16	Photo Finishing (Retail)	242
Craft Supplies	76	Photographers:	
Dancing:		Aerial	12
Ballrooms	10	Commercial	190
Instruction	55	Portrait (4)	164
Supplies	19	Supplies and Equipment	-
		Wholesale	41
Flower Arranging:		Piano and Organ Movers	19
Instruction		Pianos:	
Glass:		Instrument	82
Stained and Leaded	35	Repair and Tuning	60
Hobby and Model Supplies:		Quilting	14
Retail	57	Records:	
Libraries:		Retail	72
Public	108	Wholesale and Manufacturers	32
Magicians	5	Sculptors	9
Supplies	5	Silver and Goldsmiths	6
Motion Picture:		Theatres (5)	129
Supplies and Equipment	21	Theatrical:	
Film Libraries	18	Agencies (6)	12
Laboratories	5	Equipment and Supplies	18
Producers and Studios	60	Makeup	5
Murals	9		
Museums	23		

Source: Minneapolis and St. Paul Yellow Pages with duplicate entries deleted.
May understate the number of establishments in the Minneapolis-St. Paul SMSA.

- (1) Includes fine arts, graphics, photography, prints, framing.
- (2) Includes many specialty shops such as religious, science fiction, adult newsstands, etc.
- (3) Includes both individuals and groups.
- (4) The percentage of portrait photographers also listed as commercial photographers is 20%.
- (5) Includes playhouses, movie houses, adult pictures and driveins.
- (6) Includes talent agencies magicians, entertainment camps.

Other local retail establishments serve the needs of professional artists and amateurs as well as the general public residing both within and outside the Twin Cities SMSA. These include industries involved in the manufacture and distribution of arts-related goods and services, ranging from arts and crafts supplies and musical instruments to photographic equipment and books. Arts services overlooked range from television and recording facilities, to movie distribution, conservation and a host of other arts-related production and distribution activities.

In the following section of this report we review our findings concerning the economic impact of the ten examined institutions. The concluding section of this study is devoted to a review of the limited nature of our analysis, including a discussion of the less tangible economic effects that have not been identified.

SECTION III: THE ECONOMIC EFFECTS OF TEN CULTURAL INSTITUTIONS ON THE MINNEAPOLIS/ST. PAUL METROPOLITAN AREA

A. Study Procedures

Scope of Study

This study reports on the economic effects of the ten local cultural institutions selected by the Twin Cities Metropolitan Arts Alliance and described briefly at the end of Section I of this report. The organizations examined are illustrative of various types of cultural attractions available locally but are not a scientific sample. No attempt has been made to assess whether the effects attributable to the examined institutions are typical of the broader universe of Twin Cities area cultural activities. Additional caveats concerning the interpretation of study findings and their use in developing cultural or economic development policies are presented in the concluding section of this report. The conservative and limited nature of our methods is reviewed below. In the discussion that follows, terms such as "local," "the Twin Cities metropolitan area," and "the Minneapolis/St. Paul region" are used interchangeably to identify the Minneapolis/St. Paul Standard Metropolitan Statistical Area (SMSA), which, as noted earlier, includes Hennepin, Ramsey, Anoka, Dakota, Washington, Wright, Scott, Carver, and Chisago counties in Minnesota and St. Croix county in Wisconsin. All figures are for fiscal 1978 unless otherwise noted.

Study Methods and their Limitations

To assess the local economic effects of arts institutions, we have developed an approach that focuses on the impact of institutional

operations on important sectors of the community. Various aspects of institutional operations are referred to as direct effects. The conservative and limited nature of the model reflects its narrow focus on the most readily available direct effects: local spending by the institution, its staff households, guest artists, and audiences. These direct effects are then analyzed using a 30 equation model to determine secondary effects on government, business, and individuals. The discussion below highlights various other conservative aspects of our methodology that may lead to an underestimate of total direct effects. In particular, the reader is referred to the discussion of audience spending which reviews the impact of our conservative approach to identifying local and visitor spending.

Direct effects are identified using the procedures discussed below. These expenditures made in the community by the institution, its staff, guest artists and audiences have a secondary impact inasmuch as they lead to local personal incomes and jobs, additional local business volume, bank deposits, investments by firms in needed property and equipment, and tax revenues from such sources as sales, property and income taxes. We have sought, in effect, to trace the impact of a flow of dollars through the community beginning with an initial expenditure by the examined institutions, their staff, guest artists and audiences.

Local expenditures by the institutions represent a return to the community of income from various sources. These include grants from private and governmental sources, contributions, sales to non-local residents, and endowments. Some portion of institutional income represents "new" dollars in the sense that they were not already in the community and might never have appeared or remained were it not for the examined

institutions. For example, ticket and other sales to visitors involve dollars not already in the community as may all or a portion of grants from various private and governmental sources. We have not attempted to identify "new" dollars except in the case of visitor spending nor have we examined the extent to which the arts restrict imports, i.e., include sales that might have gone to institutions outside the community had there been no locally available activities.

Many persons believe that there is a richer, less tangible, and more indirect sense in which arts and cultural activities affect the local economy. We have traced the impact of expenditures directly associated with institutional operations. Some persons believe that the availability of cultural attractions has an additional impact due to effects on the perceptions, satisfactions and resulting behavior of households and firms. (for example, the decision by a firm to locate in the community or remain and expand.) No attempt has been made to identify and assess these more subtle and indirect relationships.*

Data Requirements

It was necessary to conduct several surveys in order to identify local spending by the examined institutions, their staff, guest artists and audiences. Institutions were asked to complete a data inventory which

* These issues are explored in more detail in David Cwi, "Models of the Role of the Arts in Urban Economic Development", forthcoming in Economic Policy for the Arts, Hendon and Shanahan (eds.), ABT Books, 1980. Research on the implications of "economic impact" data for regional cost-sharing of arts and cultural institutions by the several units of government that comprise a metropolitan area can be found in David Cwi, "Regional Cost-Sharing of Arts and Cultural Institutions," Northeast Regional Science Review, Vol. IX, 1979.

includes necessary information on their operating and financial characteristics, including total expenditures with local firms. This inventory was completed with assistance from local study staff. Questionnaires were also completed by the staff and audiences of the examined institutions. In addition, extensive data were collected from locally available reports on matters as varied as the tax rates and bases for all local jurisdictions, local governmental expenditures, and the number of local housing units and households. Our procedures included the training and monitoring of local study staff together with documentation of local procedures. Various procedures were utilized to assure audience study quality. A complete review of data requirements and procedures is provided in a forthcoming technical supplement. Selected issues regarding estimates of audience spending are reviewed below.

B. Direct Effects

The direct effects of the examined institutions include local spending for goods and services, salaries and wages to local residents, and expenditures by guest artists and audiences. Each of these effects is discussed below. As noted earlier, we have not identified the extent to which these direct effects involve "new" dollars except in the case of visitor audience spending. Exhibit 5 presents selected data on institutional direct effects during fiscal 1978. These direct effects lead to secondary effects involving local businesses, government and individuals. These are reviewed immediately following our discussion of direct effects.

Exhibit 5

Summary of Direct Effects for Ten Arts Institutions
in the Minneapolis/St. Paul SMSA, FY 1978

	Total for all Institutions	% of Total Direct Spending	Highest and Lowest Values for the Examined Institutions	
			Low	High
Local expenditures of the institutions for goods and services	\$ 7,335,778	26%	\$141,137	\$1,622,068
Employee salaries and wages	\$10,852,362	38%	\$226,220	\$1,969,802
Local audience spending (other than ticket price)	\$ 7,339,916	26%	\$ 38,002	\$1,777,701
Non-local audience spending (sole reason*)	\$ 2,967,612	10%	\$ 11,374	\$1,111,746
Guest artist spending	\$ 104,223	**	\$ 0	\$ 35,991
TOTAL DIRECT SPENDING	\$28,599,891	100%		

* Only includes spending by visitors indicating that attendance at the examined institution was the sole reason for their visit to Minneapolis/St. Paul. For data on other classes of visitors see text and Exhibit 6.

** Less than 1%.

Local Institutional Expenditures for Goods, Services and Salaries

It is estimated that the examined institutions made 70% of their expenditures for goods and services with local vendors and that this totalled \$7,335,778. The percentage of non-labor expenditures made locally by the examined institutions ranged from 55% to 99%. An additional \$10,852,362 was spent for salaries and wages to local households. No estimate has been made of the impact of additional earned and other income by institutional employee households. (The average percentage of total household income earned at any one of the examined institutions was reported by their full-time employees to range from 80% to 98%).

Guest Artist Spending

Each year, cultural institutions also contract with non-resident designers, directors, conductors, featured soloists, touring groups and others. These non-resident "guest artists" were reported to have spent a total of \$104,223 locally. No attempt has been made to include spending by guest artist entourage.

Audience Spending

Decisions regarding the handling of audience data can have a major impact on "economic impact" estimates. Be apprised that we have only counted the ancillary spending of visitors from outside the metropolitan area who indicated that attendance at the arts event was their sole reason for being in the community.* At some institutions this is a small

*Persons may visit a community for a number of reasons and once there may happen to attend a cultural event, a decision they made only after they arrived. Under these circumstances, it seems inappropriate to count expenses incurred during their visit as an impact of the cultural institution. Even when they planned ahead of time to attend the cultural activity, this may not have been the sole reason for their visit. In keeping with studies to date, we have counted all complementary spending by local audiences as an impact of the arts. This should not be taken to imply that this spending might not have occurred had there been no arts activity (c.f. the caveats that conclude this report). These issues will be explored further in the paper in progress reviewing the entire Partnership Cities project.

percentage of total visitor attendance and spending. It is important to note that many visitors indicated that they had planned ahead of time to attend even though attendance at a cultural activity was not the sole reason for their visit. Exhibits 6 and 7 present selected data on visitor spending. These data can be used to estimate the impact of audience spending utilizing other (less restrictive) assumptions.

As can be seen from Exhibit 6, total attendance by local residents is estimated to be 2,389,824 persons. At the examined institutions, local audiences spent sums ranging from \$2.13 to \$3.99 per person per visit for items such as meals and parking. During fiscal 1978, local audiences are conservatively estimated to have spent \$7,339,916 over and above admission fees.

An estimated 375,624 visitors from outside the SMSA attended the examined institutions during fiscal 1978.* They comprised from 4.2% to 20.5% of total attendance depending on the institution. Of these visitors, 112,197 are estimated to have visited the Twin Cities specifically to attend the institutions under study. Many other visitors expected to attend while visiting the Twin Cities, but it was not their "sole reason" (c.f. Exhibit 7).

*In evaluating audience expenditures, it is important to note that audience surveys conducted to estimate audience spending were carried out in the late fall and winter. While this fell within the season of several of the examined institutions, it excluded the spring and summer months. This may have affected estimates of the number of visitors to the Twin Cities area that attended the institutions as well as estimates of audience spending. In addition, data on average per capita spending, while appropriate for the calculations necessary to estimate economic effects, may be less useful as a descriptive measure of a typical audience member's spending. Median spending was significantly less due to the fact that many parties reported none or very little spending. These issues, including the quality of data on spending available from self-administered questionnaires, will be explored further in the paper in progress reviewing the entire Partnership Cities project.

Exhibit 6

Audience Summary Data for Ten Arts Institutionsin the Minneapolis/St. Paul SMSA*

	<u>Total Over Ten Institutions</u>	Highest and Lowest Values for the Examined Institutions	
		<u>Low</u>	<u>High</u>
<u>Total Attendance</u>			
Local attenders	2,389,824	10,920	541,200
Non-local attenders (total)	375,624	697	84,063
Non-local attenders (sole-reason)	112,197	430	42,032
<u>Average Over Ten Institutions</u>			
Where Audience Resides			
% residing:			
1) in Twin Cities	41.3%	31.1%	59.8%
2) outside Twin Cities but in SMSA	45.1%	29.7%	57.6%
3) outside SMSA	13.6%	4.2%	20.5%
<u>Audience Spending</u>			
Local Audience			
% of individuals reporting any spending	71%	46%	86%
Per Capita spending	\$3.07	\$2.13	\$3.99
Non-local Audience			
Per Capita spending:			
sole reason	\$26.45		
not sole reason (other visitors)	\$69.54		
<u>Other Non-local Audience Data</u>			
Mean distance traveled to event/performance:			
sole reason	77 miles		
not sole reason (other visitors)	73 miles		
% staying in hotel:			
sole reason	18%		
not sole reason (other visitors)	20%		
Mean number of nights in the area:			
sole reason	0.77 nights		
not sole reason (other visitors)	4.29 nights		

* Surveys conducted in Fall and Winter of 1978-79. Attendance adjusted to exclude in-school performances and institutional events outside the SMSA. The average reported for all institutions is weighted based on this adjusted attendance. See technical supplement for information on methods and procedures.

Exhibit 7

Ten Minneapolis/St. Paul Arts Institutions: Percentage
of Audience from Out-of-Region

Name of Institution and Total Audience Sample Size	% Audience From Out-of-Region	% of Out-of-Region Audience Who Expected to Attend Institution	% of Out-of-Region Audience Who Came Specifically to Attend Institution
The Children's Theatre (n=461)	10.3	81.8	52.3
Chimera Theatre (n=638)	6.0	35.3	8.8
The Cricket Theatre (n=646)	7.3	65.9	29.3
The Guthrie Theatre (n=892)	20.5	91.6	50.0
Minneapolis Institute of Arts (n=427)	17.7	75.3	26.0
Minnesota Dance Theatre (n=450)	6.1	96.2*	61.5*
Minnesota Orchestra (n=1013)	4.3	88.6	40.0
St. Paul Chamber Orchestra (n=931)	4.2	77.1	31.4
Walker Art Center (n=524)	11.0	70.4	16.7
The Science Museum (n=828)	18.2	61.4	20.7

* There are only a limited number of visitor cases in these instances due either to small sample size or to the small percentage of visitors in the audience on the dates surveyed. These data should be treated with caution.

Visitors from outside the SMSA are of special interest inasmuch as their spending represents "new" dollars. Across all examined institutions, surveyed out-of-region "sole reason" visitors reported per capita expenditures of \$26.45 resulting in total expenditures of \$2,967,612 that can be conservatively attributed to the drawing power of the examined cultural activities.* Persons for whom attendance at the cultural institutions was not their sole reason for being in the community spent an additional \$18,318,714.

C. Secondary Effects

The direct effects described above represent purchases of goods and services from local firms by the examined institutions, their staff, guest artists and audiences. As we have indicated, some of these purchases are made with dollars already in the community, e.g. that portion of admission income received by the institution from local residents (as opposed to visitors) and returned to the community through institutional salaries, wages and local purchases of goods and services. Included also are contributions or payments for services from local government. Data on government revenues received by the examined institutions in fiscal 1978 is presented in the section on government expenditures and revenues.

These direct effects, some of which involve "new dollars," represent institution-related expenditures with local firms and local households. This income is in turn respent by them. Responding in the community of dollars identified as direct effects leads to secondary effects involving local businesses, government, and individuals. These secondary effects

*As can be seen from Exhibit 7, at several institutions the sample of visitors was so small as to make analysis difficult for items as variable as visitor spending. Analysis across institutions was performed as described in the technical supplement. Estimates of visitor spending should be treated with caution.

take a variety of forms, including additional local personal income and jobs, additional local business volume, bank deposits, investments by firms in needed property and equipment, and tax revenues from such sources as sales, property and income taxes.

Secondary Business Volume, Personal Income and Jobs

Interindustry or input-output analysis has evolved as a principal analytical tool for identifying secondary effects such as secondary business volume, personal income and jobs. Because an appreciation for the technique is useful for understanding these secondary effects, we will take a moment to briefly review it. A principal purpose of the technique is to identify the portion of institution-related direct effects that is respent locally by local households and firms and to assess the impact of this responding.

The process is called "interindustry" analysis because it begins with the recognition that a sale in any one industry results in a complex interindustry interaction as firms buy and sell to one another. To produce and sell an additional unit of output, a firm requires a variety of resources, including goods, services, and labor. Some of these needs can be met locally through purchases from local firms. Others cannot. Consequently, only some portion of any dollar of sales remains in the community; namely, that portion that is returned to the community through local salaries and purchases from local suppliers. These suppliers in turn must purchase goods, services and labor. Some of their needs can be met locally and others not. This leads to further leakage. (Hence, the importance of industries that bring new dollars into the community.)

Similarly, households that receive income from local firms meet some of their needs through purchases from local firms while other needs are met by purchases made outside the community.

Thus, an initial dollar of sales in one industry results in a chain of transactions involving other industries which return some portion to the local economy to the extent that their needs can be met locally. By adding up the diminishing increments of this original dollar after every transaction with local vendors, we can estimate total business volume associated with an initial dollar of sales. A similar process can be used to identify the portion of this dollar of sales that is respent by local firms as salaries and wages. Estimates can also be made of the number of jobs in other business sectors supported by a chain of interindustry transactions beginning with institution-related direct effects.

Input-output coefficients were used to estimate secondary business volume, personal income and jobs associated with the fiscal 1978 direct effects of the examined institutions. We estimate that the secondary business volume will eventually total some \$57,211,537. This is estimated to result in \$21,720,604 in additional wages representing 3,053 Twin Cities area jobs. These jobs are in addition to the 777 individuals employed full-time at the examined institutions.*

Additional Investment and Expansion of the Local Credit Base

Additional secondary effects include an expansion of the local credit base due to bank deposits held locally by the examined institutions, their

* Does not include employees living outside the SMSA, nor does it include the 16 full-time equivalent employees paid under the Comprehensive Employment and Training Act (CETA). Volunteers are also excluded from the economic impact analysis.

employees, and the local businesses benefitting from institution-related direct effects. We estimate that average monthly fiscal 1978 balances in business and employee savings and checking accounts totaled \$7,576,561. When reduced by federal and state cash reserve requirements, this allows an initial expansion of the credit base totalling \$6,849,136.

Finally, in fiscal 1978 area firms benefitting from institution-related direct and secondary business activity are estimated to have invested \$15,837,042 in plant, inventory and equipment in support of this business volume. This represents the fiscal 1978 value of these assets, not expenditures made in fiscal 1978, although a portion of these assets may have been acquired in that year. Expenditures were not necessarily made with local firms. Exhibit 8 presents estimates for each of the secondary effects discussed above.

D. Government Expenditures and Revenues

In addition to estimating the direct and secondary effects on businesses and individuals attributable to the examined institutions, we have sought to estimate the effect on local government revenues and expenditures in fiscal 1978. Local governmental revenues examined include real estate taxes paid to metropolitan area jurisdictions by the examined institutions and their employee households as well as a portion of property taxes paid by businesses benefitting from institution-related direct effects. Estimates were also made of local sales and income tax revenues attributable to institution-related direct effects (excluding tax exempt expenditures by the institutions themselves.) Additional governmental revenues identified include local hotel taxes, gasoline taxes and parking revenues. Fees to local governments paid by employee households are not included.

Exhibit 8

Summary of Secondary Economic Effects for Ten Arts Institutions
in the Minneapolis/St. Paul SMSA, FY 1978

Secondary business volume generated by institution-related direct effects	\$57,211,537
Secondary personal incomes generated by institution-related direct effects*	\$21,720,604
Number of secondary full-time jobs in Columbus SMSA attributable to institution-related direct effects**	3,053
Initial expansion of the local credit base	\$ 6,849,136
Current value of backup inventory, equipment and property	\$15,837,042

* Does not include \$10,852,362 in salaries to employees at the ten arts and cultural organizations.

** Does not include 777 full-time jobs at the ten arts and cultural organizations.

Our estimates of costs to local governments in the Twin Cities area are based on estimates of local governmental operating costs associated with the provision of services to employee households including the cost of public instruction for households with children in the public schools. (No estimate has been made of the costs associated with services to the institutions themselves.) Local government contracts for services, grants and operating subsidies are included when applicable and are presented in Exhibit 9. The examined institutions are tax exempt facilities. No attempt has been made to estimate the value of foregone property taxes.

Exhibit 10 summarizes institution-related governmental costs and revenues. Included as costs are local governmental grants and fees for services (cf. Exhibit 9). In reviewing Exhibit 10, bear in mind the limited nature of our analysis. No information is available by which to assess whether the identified effects on business, individuals and government are typical of the broader universe of Twin Cities area cultural institutions. The tax effects shown are specific to the examined mix of institutions.

Revenues to local government include real estate taxes paid to jurisdictions in the Twin Cities SMSA by the arts institutions and their employees, and taxes on business property devoted to servicing the institutions. These totaled \$1,483,786 in fiscal 1978. Local admissions taxes collected by the Minneapolis institutions totaled \$171,101. Local hotel taxes, gasoline taxes and state-aid to local governments attributable to institution-related families provided an additional \$234,434 in local government revenues. Parking revenues were estimated at \$246,019 for a

Exhibit 9

Government Revenues of Ten Arts InstitutionsMinneapolis/St. Paul SMSA, 1977-1978

	<u>Federal</u> ²	<u>State</u>	<u>Local</u> ³	<u>Total</u>
Children's Theatre	\$ 37,500	\$ 75,000	\$ 8,000	\$120,500
Chimera Theatre ⁴	--	--	18,500	18,500
Cricket Theatre	7,500	14,000	--	21,500
Guthrie Theater	155,000	117,285	6,000	278,285
Minnesota Institute of Arts	119,534	107,450	--	226,984
Minnesota Dance Theatre	16,162	44,030	--	60,192
Minnesota Orchestra	160,000	170,000	8,000	338,000
St. Paul Chamber Orchestra ⁴	80,000	67,795	30,000	177,795
Walker Art Center	214,245	85,295	7,000	306,540
Science Museum ⁵	--	--	--	--
TOTAL	\$789,941	\$680,855	\$ 77,500	\$1,548,296

SOURCE: Institutional Data Inventories, Auditors' Reports, 1977-1978

¹Excludes non-operating grants.²Excludes CETA funds.³Includes all revenues received from governments in the SMSA.⁴Amounts given by St. Paul-Ramsey Arts & Science Council pro-rated by overall percentage of Arts Council income provided by Ramsey County. Figure used was 10% for 1978, provided by Tom Prokosch, St. Paul-Ramsey Arts & Science Council.⁵Data unavailable.

Exhibit 10

Selected Revenues and Costs to Local Government Attributable
to Ten Minneapolis/St. Paul Arts Institutions

Revenues

Real estate taxes paid to jurisdictions in the Minneapolis-St. Paul SMSA by the arts institutions, their employees, and business property devoted to servicing the institutions ²	\$ 1,483,786
Admissions tax ³	\$ 171,101
Local income tax revenues attributable to institutional employees and their households	\$ 0
State aid to local government attributable to institution-related families	\$ 195,710
Transient lodging tax	\$ 7,148
Gasoline taxes	\$ 31,576
TOTAL	\$1,880,321
Parking revenues ⁴	\$ 246,019
Total revenues to local governments	\$2,135,340

Costs

Total costs to local government	
Operating costs of local governments and schools ⁵	\$1,069,025
Grants to study institutions	\$ 77,500
TOTAL	\$1,146,525

¹ Does not include estimates of sales, property, or income taxes associated with institution-related secondary effects. See discussion in text.
Understated due to rapid expansion of Science Museum and unavailability of recent Science Museum data except for audiences.

² Business property taxes based on assessed value and weighted millrate for seven county metro areas, not SMSA.

³ Taxes on admissions to events (at study institutions) in Minneapolis. Does not include any estimate of state sales tax returned to local jurisdictions, data not available. Also, does not include any effects due to 3% Minneapolis tax on food and drinks since it is only applicable if live entertainment is present. Stadium tax not in effect at time of study.

⁴ Based on estimates made by institutional personnel.

⁵ Includes cost of service to employee households not services to institutions.

total of \$2,135,340 in local government revenues attributable to the examined institutions.

Sales, income and property tax estimates are undoubtedly conservative inasmuch as no estimate has been made of taxes paid by individuals benefitting from institution-related secondary effects. In addition, no attempt has been made to assess the favorable or unfavorable spillover effects of institutional operations on surrounding taxable property values.

These may be either positive or negative. Finally, no attempt has been made to assess the governmental costs or benefits associated with the more subtle effects claimed for the arts and alluded to at the outset of this discussion of economic effects. Our approach to estimating tax revenues is described in the separate technical supplement accompanying this report. Data used in developing these estimates are also included.

Results of the employee survey indicate that 84% of employees at the examined institutions reside in the Twin Cities, with the remainder concentrated in Hennepin county. Approximately 37% of employees are homeowners. Employees report a total of 179 children in local public schools.

Costs to local government included \$1,069,025 in operating costs of local governments and schools, and \$77,500 in local government grants to the examined institutions for a total cost to local government of \$1,146,525. As noted above this does not include additional costs that may be associated with specific governmental services to the examined institutions.

The following section concludes this report with caveats regarding the study findings, including cautions against the possible misuse of the findings:

SECTION IV: CONCLUDING CAVEATS REGARDING STUDY FINDINGS

We have sought to identify a limited range of effects directly traceable to institutional activities when the institution is viewed simply as a local business enterprise. The importance of artistic and cultural institutions to individuals, households, and firms and hence their broader and less tangible benefits may have little to do with public awareness of their specific economic attributes. We have focused quite narrowly on direct dollar flows represented by the institution's local expenditures for goods, services and labor and the expenditures of its guest artists and audiences. We have called these direct effects and conservatively estimated the secondary effects in a variety of areas. For the reasons noted in the discussion of these effects, some estimates may be quite conservative, especially estimates of audience spending and its impact.

The data contained in this report can be used to address a number of questions regarding the economic role of the examined artistic and cultural institutions. It is clear, for example, that they serve both residents of and visitors to the metropolitan area. Arts activities may sometimes be solely responsible for inducing persons outside metropolitan areas to make day and overnight trips. It may be assumed that even when arts activities are not solely responsible for these visits, they may often be one among other planned activities, and so may directly contribute to increasing the number of visits.

As we noted earlier in our brief review of the Twin Cities area economy and arts community, this study is not intended to pass judgement on the

total local cultural industry. In addition, we have only sought to identify direct and secondary effects as defined in this report. This means that a variety of potentially interesting effects of the arts have been overlooked, effects that are not very well understood in any case.

Included are claimed effects of the arts that may be important to central cities as well as to the regions of which they are a part.

For example, arts events and facilities regularly bring thousands of suburban residents back to the city and can help draw people to redeveloped downtown and neighborhood areas. This may help to maintain markets for other city businesses and create an urban environment attractive not only to residents but to tourists and convention visitors as well. Consequently, arts and other facilities may be useful in helping to create a climate in which the decision to locate or remain in the city or region is viewed not as a risk but as an investment. But good research is scarce. And the role of the arts and the range of their more subtle effects is far from clear.*

Policy makers are increasingly aware of the need to plan for multiple objectives. Activities and programs that were once viewed in complete isolation now must be understood in terms of the contributions they can make to a community's broader objectives, including objectives in such areas as economic development and community revitalization. This study is not intended to pass judgement on the economic development role of specific arts activities. In this connection it may be relevant to repeat and

*In particular, it is difficult to isolate the arts from various other aspects of community life, ranging from historical and social factors, to property taxes, the availability of investment dollars, changes in family size and structure, metropolitan growth policies, and so forth. Further research is necessary before we will be able to model these more subtle effects and be in a position to predict the full potential impact of an investment in an arts activity.

expand the caveats presented in the introduction to the Baltimore Case Study pilot project which preceded the Partnership Cities Project.

- (1) In presenting our analysis of direct and secondary effects we are not passing judgement on the role of the examined institutions or cultural institutions in general in achieving economic development or other objectives. If direct and secondary effects are relevant to public funding for various leisure services then selected cultural institutions may warrant support more than many other leisure services. However, it cannot be inferred from this study that such support is to be preferred in general over other alternative uses of public or private dollars in the fulfillment of specific economic development objectives.
- (2) Some of the economic effects cited may have occurred even in the absence of the examined institutions. For example, arts institutions vie for leisure-time dollars that might have been spent in the community even if they were not spent on the arts. Conversely, some of the interest in artistic and cultural activities may be *sui generis* so that audiences might have travelled to other cities to satisfy their desire for the arts, or they may have substituted by attending complementary local or touring activities. In short, if specific institutions had not existed, we simply do not know whether others would have, or, in any case, the extent to which the economic effects noted would not have occurred.
- (3) In providing this analysis of the economic effects of a sample of cultural activities we are not advocating that economic impact data be used as important determinants of public policy toward the arts especially in the absence of clear cut policies of support of the arts for their own sake.
- (4) It is important to note that the institutions examined in this study are at best a sample of a much wider range of local non-profit and commercial activities. In short, the impact of the arts and cultural sector as a whole is much broader than portrayed in this report.